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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,297	07/22/2004	Sven-Ingvar Lundahl	10400C-000112/US	1854
30593	7590	05/03/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			LANGDON, EVAN H	
P.O. BOX 8910			ART UNIT	
RESTON, VA 20195			PAPER NUMBER	
			3654	

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center"><b>Office Action Summary</b></p>	<p>Application No.</p> <p align="center">10/502,297</p>	<p>Applicant(s)</p> <p align="center">LUNDAHL, SVEN-INGVAR</p>	
	<p>Examiner</p> <p align="center">Evan H Langdon</p>	<p>Art Unit</p> <p align="center">3654</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br/> Paper No(s)/Mail Date <u>7/22/04</u>.</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)<br/> Paper No(s)/Mail Date. ____.</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: ____.</p> |
|---|---|

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the end flanges must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. There is only one end flange shown and it is unclear how the bobbin would be formed having two end flanges.

The drawings are objected to because the cross-section of the bobbin showing the material as plastic is incorrect. The shown cross-section is that of metal. Please see MPEP 608.02.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regards to claims 1 and 8, the claim limitation, “a bobbin of plastic, which has a cylinder...circumferential end flanges and is made of a U-shaped channel” is indefinite. It is not understood if the U-shaped channel is a separate element, or if the U-shaped element is made from the cylinder and the circumferential end flanges.

In regards to claim 1, the limitation “essentially” on line 5 is indefinite.

Claim 5 recites the limitation "the grooves in the inner circumferential surface" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blake (US 1,437,954) in view of Orange (US 5,513,819).

Blake discloses a bobbin of plastic, which has a cylinder 1 formed integrally with circumferential end flanges 2 forming U-shaped channel and each end flange 2 consists of a plurality of spaced apart radial flange elements 2 distributed along the circumference of the cylinder 1.

Orange teaches a bobbin of plastic, which has a cylinder formed integrally with circumferential end flanges 14, 16 forming U-shaped channel and each end flange a made of one pieced of plastic (col. 2 line 39-43).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the material of the bobbin of Blake to be made of plastic as suggested by Orange, to make the bobbin available for reuse (col. 2 line 39).

Orange discloses the claimed invention except for the plastic bobbin formed by injection molding. It would have been obvious to one having ordinary skill in the art at the time the invention was made to form a one-piece element made of plastic be means of injection molding since it was known in the art that injection molding is a widely used manufacturing process.

In regards to claim 2, Blake as modified by Orange teaches the flange elements 2 (Blake) over the entire radial extent have an essentially constant extension in the circumferential direction, the flange elements of each end flange having a total extension in the circumferential direction that is essentially equal to the circumference of the cylinder.

In regards to claims 3-5, Blake as modified by Orange teaches a plurality of axial grooves (Fig. 2 Blake) are formed in the outer and inner circumferential surface of the cylinder, where the outer and inner circumferential grooves are located opposite of each other, each groove extending the entire length of the cylinder between a point between two adjoining flange

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elements of one end flange and a point between two adjoining flange elements of the other end flange.

In regards to claim 6, Blake as modified by Orange teaches each flange element at its radially inner end has a lug 26 (Orange) which extends past the inner circumferential surface of the cylinder and has a circumferential extent that decreases radially inwards.

It would have been obvious to perform the method steps of claims 8-12 when manufacturing the reel bobbin of Blake as modified by Orange in its usual and expected fashion.

In regards to claim 9, Blake as modified by Orange teaches the channel ends 36, 40 are connected to each other by protrusions 38, 42 (Fig. 1A and 3, Orange).

### ***Claim Rejections - 35 USC § 103***

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blake as modified by Orange, and in further view of Koskelainen (US 6,021,974).

Koskelainen teaches a reel bobbin having an articulate projection 8 connecting flanges 7 and 10.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the flanges of Blake as modified by Orange to include articulate projections as suggested by Koskelainen, to provide stability to the plastic bobbin.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evan H Langdon whose telephone number is (571)272-6948.


The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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EMMANUEL MARCELO  
PRIMARY EXAMINER